



# United States Patent [19]

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**Hamilton et al.**

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[54] **ANTI-INFLAMMATORY COMPOSITIONS AND METHODS**

WO9005183 5/1990 WIPO .

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[73] Assignee: **University of Melbourne, Victoria, Australia**

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Hart, P. H. et al., "Potential antiinflammatory effects of IL-4", *Proc. Natl. Acad. Sci.*, vol. 86, pp. 3803-3807, May 1989.

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### [57] ABSTRACT

[51] Int. Cl.<sup>6</sup> ..... **A61K 45/05**

[52] U.S. Cl. .... **424/85.2; 530/351**

[58] Field of Search ..... **424/85.2; 530/351**

Therapeutic compositions and methods for the treatment of inflammation are disclosed. The compositions comprise at least one anti-inflammatory drug in combination with the lymphokine interleukin-4 (IL-4), which components interact synergistically in the treatment of inflammation. Methods for the treatment of inflammation comprise administering to a subject in need of such treatment an effective amount of at least one anti-inflammatory drug and IL-4.

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**13 Claims, 7 Drawing Sheets**